From: Helder, Dirk
To: Wu, Jennifer; Woodruff, Leigh; Liu, Linda; Carvalho, Gabriela; Henning, Alan; Peterson, Erik
Sent: 8/25/2014 1:06:29 PM
Subject: RE: CZARA meeting follow up

Jennifer,

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Best,
Dirk Helder
US EPA
(208) 378-5749

From: Wu, Jennifer
Sent: Thursday, August 21, 2014 10:31 AM
To: Woodruff, Leigh; Helder, Dirk; Liu, Linda; Carvalho, Gabriela; Henning, Alan; Peterson, Erik
Subject: RE: CZARA meeting follow up

Perfect- thanks, Leigh. Do you have a contact in Idaho forestry who I could talk with about why the State decided to protect Type N streams? Maybe it's just obvious that all streams should be protected, but I'd like to see if I can get as much background or hard information as I can.

All, I've also been organizing thoughts on how all these different pieces fit together. As we gather information, these are the four buckets I'm putting them into to get a cohesive story. Long email ahead, so read on if you're interested.

So the good thing is that in my opinion, we have two of the four harder questions answered which are:

Does the State have buffers and/or protections in place for aerial application of herbicides on Type N streams? This should be the question we're answering for whether the program is approvable. I'd have to say no, based on the fact that their Forest Practices Act explicitly doesn't protect Type N streams, and

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What should the State do to have an approvable program? We know this, too, and there are more ideas out there to fix other gaps. I think we've come up with items that will make a difference, are practical, doable and consistent with other coastal states.

The last two are what management seem to what more clarification on, and that's where we can follow up.

Why are adequate buffers for type N streams for aerial applications important? We already have talked about why Type N streams are important in coastal areas and the listed coastal coho. We also know all other states do not allow aerial application of herbicides without either a buffer or a complete restriction on them. In my mind, this is not key to our ultimate decision, but it helps strengthen the rationale of why EPA and NOAA applied this measure.

The additional information we can look at to strengthen our understanding on this question is the background for why this was explicitly called out in 1998 (there were only 4 additional forestry mgmt measures, so there must be more background material) and why other states have put in Type N buffers.

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Secondly, there may be other CZARA constructs to on ways that programs need to function for approval. Don Waye from EPA HQ (larger CZARA tech team) also had some thoughts on this, and I'd like to get this thoughts on this.

Anyway, those are my thoughts for now, and I just wanted to share with the group for you to digest. Will be talking with several of you before we meet next week - Jenny

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From: Woodruff, Leigh
Sent: Thursday, August 21, 2014 7:56 AM
To: Wu, Jennifer; Helder, Dirk; Liu, Linda; Carvalho, Gabriela; Henning, Alan; Peterson, Erik
Subject: CZARA meeting follow up

Jenny –
Here is info on Idaho rules pertaining to aerial application of pesticides. A minimum 100' buffer width is required for aerial application to fish bearing (Class 1) and Class 2, non-fish bearing streams, which are analogous to OR Type N streams. Oregon is surrounded by States with greater protection for Type N streams.
Leigh

http://adminrules.idaho.gov/rules/current/20/0201.pdf

From IDAPA 20.02.01:
060.USE OF CHEMICALS AND PETROLEUM PRODUCTS
06. Aerial Application: (10-14-75) **a.** With the exception of pesticides approved for aquatic use and applied according to labeled directions, when applying pesticide leave at least one (1) swath width (minimum one hundred (100) feet) untreated on each side of all Class I streams, flowing Class II streams and other areas of open water. When applying pelletized fertilizer, leave a minimum of fifty (50) feet untreated on each side of all Class I streams, flowing Class II streams, and other areas of open water. (7-1-98) **b.** Use a bucket or spray device capable of immediate shutoff. (10-14-75) **c.** Shut off chemical application during turns and over open water. (10-14-75) **d.** Aerial application of pesticides shall also be conducted according to the Idaho Pesticide Law and IDAPA 02.03.03, "Rules Governing Pesticide and Chemigation Use and Application." (7-1-98)
07. Ground Application with Power Equipment. (10-14-75) **a.** With exception of pesticides approved for aquatic use and applied according to labeled directions, when applying pesticide, leave at least twenty-five (25) feet untreated on each side of all Class I streams, flowing Class II streams and areas of open water. (7-1-98) **b.** When applying fertilizer,

leave at least ten (10) feet untreated on each side of all streams and areas of open water. (10-14-75)
08. Hand Application. (10-14-75) **a.** Apply only to specific targets; such as, a stump, burrow, bait, or trap. (10-14-75)
b. Keep chemicals out of all water sources or streams. (10-14-75)

Stream definitions:
a. Class I streams are used for domestic water supply or are important for the spawning, rearing or migration of fish. Such waters shall be considered to be Class I upstream from the point of domestic diversion for a minimum of one thousand three hundred and twenty (I,320) feet.
b. Class II streams are usually headwater streams or minor drainages that are used by only a few, if any, fish for spawning or rearing. Where fish use is unknown, consider streams as Class II where the total upstream watershed is less than two hundred and forty (240) acres in the north forest region and four hundred and sixty (460) acres in the south forest region. Their principle value lies in their influence on water quality or quantity downstream in Class I streams.

General info on IDL's website:

Pesticides and Herbicides

- Use an integrated approach to weed and pest control, including manual, biological, mechanical, preventative, and chemical means.
- To prevent the entry of hazardous substances into surface waters:A. Chemical treatments within the streamside management zone shall be by hand and shall be applied only to specific targets. B. Leave a 25-foot buffer along surface waters when chemicals are being applied through ground application with power equipment. C. For aerial application, leave at least a 100-foot buffer along live water and do not spray in the SPZ. D. Always refer to chemical label instructions for additional guidance on use near water and required buffer zones.

To enhance effectiveness and prevent transport into streams, apply chemicals during appropriate weather conditions (generally calm and dry) and during the optimum time for control of the target pest or weed.

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From: Wu, Jennifer
Sent: Wednesday, August 20, 2014 4:23 PM
To: Helder, Dirk; Liu, Linda; Carvalho, Gabriela; Henning, Alan; Woodruff, Leigh; Peterson, Erik
Subject: RE: Meeting

Thanks, Dirk, and thanks to everyone on the call. There was a lot of information that we've covered and also a lot of information for managers and attorneys to digest. So I think we have their first reaction, but it'll really be the second meeting where people outside of our subgroup will be able to dig deeper to consider the issues.

As I said on the call, I'm finding it hard personally not to recommend disapproval of the State's program for what we've found out so far. I think it'll be good for us to think carefully how to look at the information and frame our arguments. I think it's very important to talk with folks from other States on their forestry riparian rules for aerial application on Type N streams, and my gut stays there's more information out there that shows why everywhere else there are protections on Type N streams. I plan to talk with Mark Hicks from Washington, but if you have contacts in Idaho, California, or BLM, I'd appreciate if you could send it to me. I'll also ask the library to do some literature searches to ground us.

Secondly, we should vet out more the programmatic question on CZARA. We should talk with the EPA CZARA person who'll also be able to lend the CZARA program perspective on what an approvable program needs to show.

So I'll send out an invite for our review team to get together again , and we should agree on what our focus will be for the call so we can use everyone's time well.

Thanks again,
Jenny

From: Helder, Dirk
Sent: Wednesday, August 20, 2014 2:43 PM
To: Liu, Linda; Carvalho, Gabriela; Wu, Jennifer; Henning, Alan; Woodruff, Leigh
Subject: Meeting

Jenny,
Good job, you captured a very difficult issue and explained it very clearly.

All,
I wanted to provide a few additional comments, I continue to feel the notification of ODF/ODA doesn't accomplish environmental protection on the ground. The applicator can make all the plans they want to but the actual field conditions at the time of application make the most difference. Weather, wind, humidity, temperature, and other factors have to be evaluated just prior to the application and decisions must be made at that moment to protect the resource and the applicator must want to protect the resource of they won't take the necessary steps. So, I agree completely that measures should be put in place to protect Type-N streams and that the applicator should be accountable for that so how to accomplish that.

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I think we need to explore the rationale for why other states put buffers in place as the first place to start and see if there is something useful there. Just my thoughts as of 3:43 pm, they may change at any moment since my head is spinning just a little…
Best,
Dirk Helder
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(208) 378-5749